

PLANT ENGINEERING AND RECORD SYSTEM

- PURPOSE:** The purpose of this addendum is to set forth suggested specifications for paper with satisfactory characteristics to be used in the commercial printing of the functional record forms introduced in Section 116, Issue No. 1 dated December 1965.
- ADDITIONS:** The following standards apply to the blank forms shown in Exhibits A, B, C, and D in Section 116, Issue No. 1, December 1965.
- REQUIREMENTS:** INDEX PAPER  
25 PERCENT RAG  
COLOR - BUFF - OPTIONAL  
SUBSTANCE - (BASIS 25-1/2 x 30-1/2 IN.) - 220 POUNDS  
THICKNESS - (APPROXIMATELY) - SINGLE SHEET, 0.0085 INCH;  
1000 SHEETS, 8.5 INCHES  
OPACITY - TEXT, ETC., E; HALF TONES, SOLIDS, ETC., E.  
INK - GREEN - OPTIONAL
- USAGE:** The four forms referred to above are to be 8½" x 14" outside measurements, and are proposed only as the office master copies. It is intended that additional copies (work copies) be reproduced from the periodically updated master copies on local office reproduction machines.



## PLANT ENGINEERING AND RECORD SYSTEM

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EXHIBITS A, B, C, D, E  
EXAMPLE: Pages 1 - 12

#### 1. GENERAL

1.1 This section is to provide REA borrowers, consulting engineers, contractors, and other interested parties with information for use in the design, construction, and operation of REA borrowers' telephone systems. It discusses, in particular, considerations in the use of a flexible numbering system for all outside plant facilities and the adoption of a new concept in plant records prepared in a complete packet, designed particularly for circuit-by-circuit engineering of buried or aerial plant, and which is applicable to all types of outside plant facilities.

#### 2. SCOPE

- 2.1 The intent is to provide engineering methods and a recording system having broad capabilities as follows:
- 2.11 Facilitate circuit-by-circuit design and cable pair allocation during the interval between partial completion of the detail maps, staking sheets, cable schematics, and actual cut-over of the exchange or portion of an exchange.
- 2.12 Provide flexibility of plant by means of advance engineering allocation of cable pairs (designated by home count assignments -- see TE & CM 628, "Cable Plant Layout.")
- 2.13 Insure that transmission design criteria relative to bridge tap length, outer end sections, loading, etc., are met and controlled during staking, construction, at cutover, and throughout the subsequent operation of the system.
- 2.14 Provide a method keyed to all establishments in the exchange area rather than being limited to the existing, signed, and chosen A, B, C, potential. It will furnish means whereby subscriber development and resulting future plant requirements may be accurately determined with a minimum of plant reinforcement and rearrangement. Any establishment may be readily located for existing or future service needs.
- 2.15 Provide a sequential outside plant numbering system directly related to establishment location with respect to a pedestal, terminal, or pole, and route mile distance from the central office.
- 2.16 Provide a procedure that is not directly related to one type of plant, i.e., aerial, buried, underground, open wire, etc., and can be used on any system regardless of size. It will list essential data for every subscriber loop and interoffice trunk in the system.
- 2.17 To establish a well defined and workable method that may be effectively used during construction of the system to direct splicing, termination of pairs, installation of drops, loading, pair assignment, home count allocation, control of line fill, and to substantially reduce the requirements for using staking sheets and cable schematics for these activities. It will also provide a record of dead pairs, cut pairs, spare pairs, and working pairs, and denote the specific function of every exchange loop.

2.18 Provide working records (inside and outside plant facilities) that may be reproduced on local machines (8½" x 14") for functional use by field personnel, especially those not operating directly out of a main control center. The recording capacity per page over existing record forms is materially increased.

## 1. THE NUMBERING SYSTEM

1.1 The rapid development of buried plant and its associated electronic components has created a need to update the methods employed for outside plant identification and location. The practice of attempting to locate a buried plant pedestal by identifying it as so near or so far from some rural house or barn is antiquated. A numbering system is needed where the permanent plant location is fixed, is controlling, and the establishment is related to the known pedestal location. The numbering system presented herein meets the following objectives:

- Is adaptable to all types of outside plant facilities, i.e., manholes, pedestals, aerial terminals, poles.
- Has a minimum and fixed number of characters.
- Requires a minimum of changes for plant expansion or rearrangements.
- Provides accurate location information for operations and maintenance personnel.
- Is easy to administer and record.

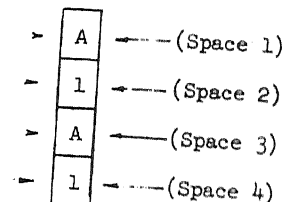
1.2 The numbering system consists of four characters: (1) a letter for cable, (2) a numeral for control point, (3) a letter for route, and (4) a number for manhole, pedestal, terminal, or pole. Pedestals, poles, etc., between two control points always count consecutively 1, 2, 3, etc., with no omissions.

CABLE LETTER

CONTROL POINT NUMBER

ROUTE LETTER

SECTION PEDESTAL OR POLE NUMBER



3.21 Space 1 is always a letter. Cables from the central office are identified A, B, C, etc., generally from a point north, clockwise around the central office.

3.22 Space 2 is always one or two numerals (1-99) except those facility identifications between the central office and the first control point which will have a dash (A-A1) in this second space. Control points and load points are the exact same locations; the control points are established and carried throughout a cable even if no loading is required. Control points are also established on open wire leads. The spacing is made to coincide with the choice of loading system, i.e., D66 = 4.5 kf, H88 = 6.0 kf, etc., or if necessary a combination of loading systems.

3.23 Space 3 is always a letter A, B, C, etc. Laterals not containing a control point are treated numerically as a part of the main route. When laterals extend beyond a control point, they are assigned the next available route letter designation.

3.24 Space 4 is always one or two numerals (1-99) except when the pedestal is a control point; then this space will have a dash (A1A-). This dash can only occur when there is a numeral in space 2.

3.3 Since loading system sections are 4,500 feet (or 6,000 feet in length in older patterns), it may be assumed, for operational location purposes, that control points occur at roughly one mile intervals (5,280 feet); i.e., a maintenance man looking for pedestal A5A1 would know it was cable A, 5th control point from central office (approximately 4.5 miles), route A, and the first pedestal beyond the 5th control point (A5A-).

3.4 The numbering system will accommodate 26 separate cables from one central office; 99 control points on any given route; 26 separate routes on a given cable; and 99 pedestals, terminals, or poles between any two control points along the route. With this flexibility and potential, it should not be necessary to deviate from the plan.

3.5 The identifying characters used on pedestals and terminals should be at least one-inch, bright colored, weatherproof, and on a dark background. The top six-inch portion of control point housings may be treated with pressure sensitive, weatherproof material of a bright color for easy identification. Control point pedestals should be kept clear of undergrowth and be easily seen from the roadway.

3.6 The numbering system, when supported by a simple directional plant diagram (See Example - Page 1), provides ready location for any desired pedestal, pole, etc., in an exchange.

#### 4. ENGINEERING APPLICATION

4.01 The Outside Plant Facility Record (OPFR) (Exhibit B) is presented for use to fill the needs set forth in paragraph 2. After the initial grouping of establishments to subscriber lines in the design procedure, the cable sizing and reduction points are tentatively located and posted on the ACD maps and/or detail maps. This data is made firm as staking progresses, along with the exact location of load (control) points and sectional pedestals. It is at this time period that the final circuit-by-circuit design engineering and the pair-by-pair allocations should be started and initial use of the Outside Plant Facility Record employed.

4.02 Where the initial engineering phases of cable loading are done on the ACD or detail maps, the pedestal numbering system is applied, and when stabilized during staking, it is entered on the Outside Plant Facility Record. The numbering is applied to manholes, pedestals, terminals, and certain poles. On long sections of open wire pole line, it generally is necessary to enter only those pole numbers at control points and where laterals or drops are separated.

4.03 The first step is to study the general layout of each cable leaving the central office. Keep in mind that the Outside Plant Facility Record is arranged to accommodate up to 50 cable pairs or any fraction thereof. Cables are therefore viewed in 50-pair segments within their distribution area (from the pedestal where a 50-pair cable emerges from a larger cable to the out or field end of all loops within that 50-pair count). Any manholes, pedestals, terminals, or poles between the reduction point pedestal and the central office that have loading or other plant components relating directly to the 50-pair count being studied must also be considered, and they are necessarily shown on the Outside Plant Facility Record. (Example Pages 4 and 6.)

4.04 When the pedestal numbering has become firm, all establishment numbers are related to their respective pedestal, etc., and listed on the Outside Plant Facility Record. The plant facility layout portion of the OPFR is then prepared. Laterals are shown as leaving the main route either right or left with back to central office. Reduction points, facility type, size, gauge and pair counts are shown. A space is left following the "pull-off" of a lateral and another space left beyond the end of the lateral. This is to facilitate the entries on the lower portion of the sheet. An arrow is drawn in the open space to indicate if the lateral is right or left from main route.

4.05 The 50-pair cable count, or fraction thereof, is entered in the cable pair column along the left side of the sheet. The control points are drawn in. It is essential to know exactly what cable pairs are to be loaded at a given load (control) point. The symbols are then filled in with pencil to represent loaded cable pairs.

4.06 Distance is not relative to the Outside Plant Facility Record, and is only determined by the number of pedestals, etc., recorded. The pedestal-to-pedestal sectional footages and the accumulated control point kilofeet are not entered until the "as built" measurements are available from the staking sheets.

4.07 The "Term. Type" column directly under the pedestal numbers may be MF pole, HA, etc., for terminal type on aerial cable and BD2, etc., for pole. Where two pedestal housings are required for space, they are shown as 2BD.

4.08 The next step is to show by symbol the end section of each loop, fill in the double line to show only the exact pedestal or pedestals the loop has been engineered to serve. The selected pairs are included in the home count for the distribution area. The open circles should be drawn to show the allocation of the cable pair to a specific pedestal or pedestals to serve one or more establishments listed and associated with the pedestal or pedestals. The circles are filled in solid with pencil when the pair is actually placed in service. In allocating loaded pairs, caution should be exercised in keeping end-section lengths within the transmission limits as set forth in TE & CM Section 424, "Design of Subscriber Loop Plant." When the pedestal section footage figures have been posted on the Outside Plant Facility Record, each loop end section should be checked, and if transmission criteria have not been met, necessary adjustments must be made. Any such miscalculations will appear at this stage, and they should be immediately noted and necessary corrections made.

4.09 For multiparty exchanges, the line equipment number is controlling, and at time of final assignment is posted in the column "TEL. OR CIRCUIT NUMBER." For one-party exchanges, the four digit connector terminal number is controlling and is entered in this column.

4.10 Main frame bridging of cable pairs is posted to the appropriate cable pair on the Legend and Notes sheets. Load coil size and other similar information not covered by symbol on the Outside Plant Facility Record is also posted on the Legend and Notes sheet.

5. CENTRAL OFFICE FACILITY RECORD (EXAMPLE - Sheets 9 and 10)

5.1 The central office facility record is designed to replace the line and station card, and is sized to be an integral part of the overall exchange packet. The information contained thereon is keyed to the connector terminal numbers. The sheet is printed on both sides thereby providing space for recording 200 connector terminal assignments on each sheet. The size is  $5\frac{1}{2}$ " x 14".

5.2 For operational purposes, where a telephone number (connector terminal number) is provided, such as on a trouble ticket, the cross reference is from connector terminal number to cable and pair.

5.3 The column headed "Station Apparatus" is also used for recording special equipment such as transmitting amplifiers, key sets (wiring plans), extension bells, etc.

5.4 The trouble record portion of the present line and station card is replaced by filing the trouble tickets as set forth in TOM Section 1238, "Trouble Reporting."

5.5 In making the initial and subsequent connector terminal assignments, care should be taken to comply with the traffic considerations in TE & CM Section 221, "Assignment of Line and Station Numbers," (Terminal Per Station Systems).

6. LINE EQUIPMENT RECORD (EXAMPLE - Sheets 11 and 12)

6.1 This form is cross-referenced to the Outside Plant Facility Record through the connector terminal numbers. The class of service does not appear elsewhere on these record forms.

6.2 The bunching block record is made a part of this form. The numbering system for bunching blocks differs with the type and make of C.O.E. and, therefore, must be obtained by the engineer from the manufacturers.

6.3 Where all one-party service is offered, the bunching block record would not be required; the line equipment record would become only a record of line equipment assigned and available, and the connector terminal numbers on the central office facility record would become all controlling for record purposes.

51-66, 68-96 14 JB- 125  
51-53, 63-65, 76-78 A4B- BC

1-18 A5F- BG 3

NOTE 3: PR. 167 has one 1A carion heater with auto. stop mounted in pedestal A2A4.

NOTE 4: Pedestal A1A- and A2A- each have approximate loading.

NOTE 5: There are four (4) each, 4 inch. flow C.O. and make A-A1. Windows 1, 2 and 3 are always with window No. 4 is vacant.

NOTE 6: The H46 terminal shown at A5B3 is installed at the south end of a 40 foot area west over Deer Creek.

NOTE 7: The spot is to be used as required and installed into the record binder as with the occasion.

●A7A5  
●A7A4  
●A7A3  
●A7A2  
●A7A1  
●A7A  
●A7A

# LEGEND & NOTES

## NUMBERING SYSTEM

CABLE (LETTER) \_\_\_\_\_

CONTROL POINT (NUMBER) \_\_\_\_\_

ROUTE (LETTER) \_\_\_\_\_

SECTION PEDESTAL OR TERMINAL (NUMBER) \_\_\_\_\_

## ESTABLISHMENT NUMBERS

MAP NUMBER \_\_\_\_\_

BLOC NUMBER \_\_\_\_\_

WIRE NUMBER \_\_\_\_\_

10 63 12

A - A 1

A 1 A -

A 1 A 1

A 1 A 1

A 1 A 1

## NUMBERING SYSTEM EXAMPLES

- CABLE A, ROUTE A, 1ST PEDESTAL FROM CENTRAL OFFICE

- CABLE A, 1ST CONTROL POINT, ROUTE A FROM C.O.

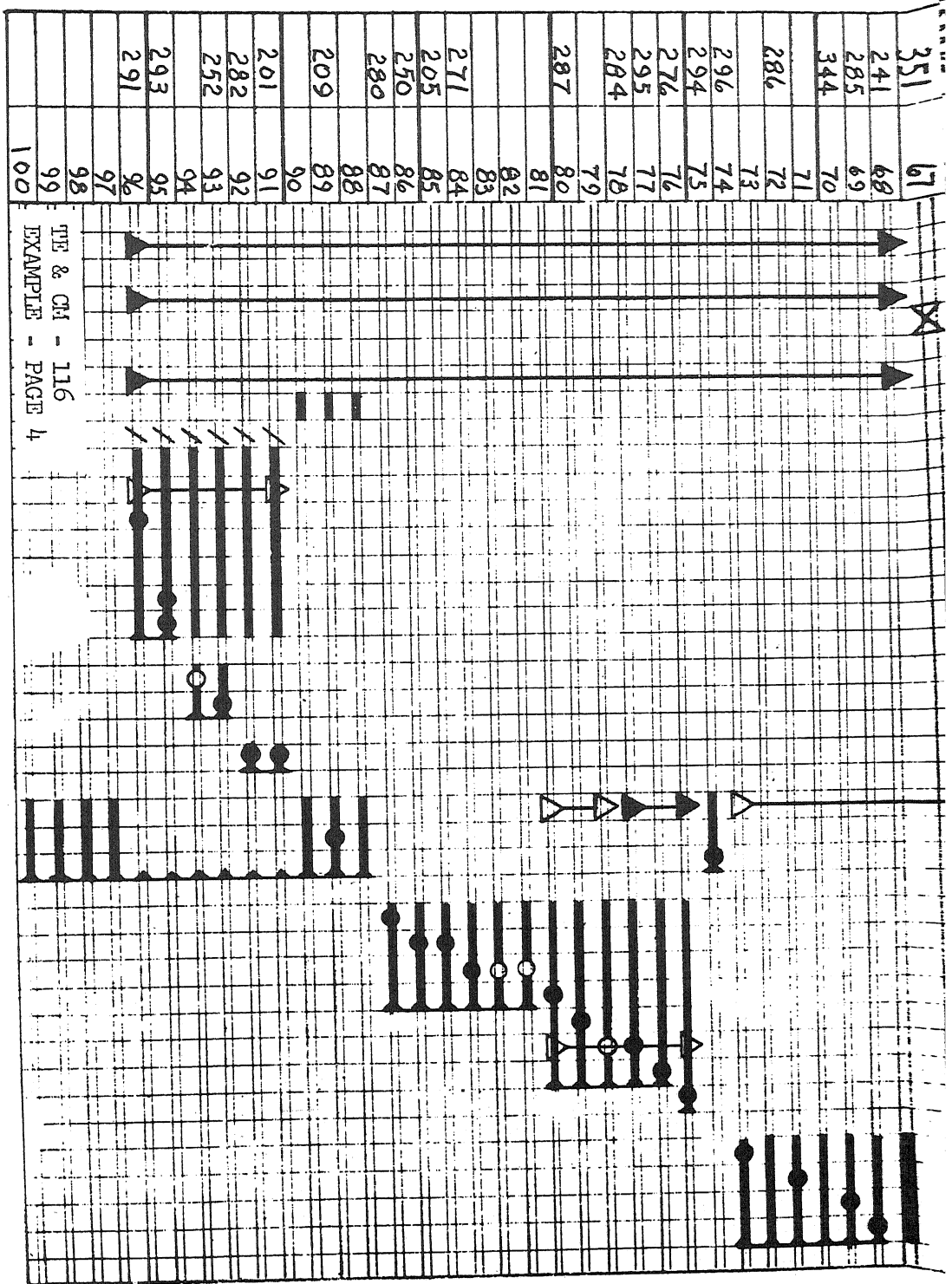
- CABLE A, 1ST CONTROL POINT, ROUTE A, PEDESTAL 1 BEYOND CONTROL POINT 1.

NOTE: Numbering system always consists of a letter, a number, a letter & a number, except when dashes apply (see above).

CABLE PAIR - IN ITS USAGE AREA	ALLOTTED PAIR	CARRIER REPEATER
ASSIGNED PAIR	TEMPORARY PAIR ASSIGNMENT	VOICE FREQUENCY REPEATER
PAIR CUT DEAD	CONTROL POINT	CARRIER CHANNEL - INDICATE IF MORE THAN ONE CHANNEL.
LOADING AT CONTROL POINT	CARRIER FILTER	FACILITY END
IDENTIFYING DEAD PAIRS		BUILDING-OUT CAPACITORS
		OPEN WIRE PIN POSITIONS

## STANDARD GROUP COLOR CODE - CABLE AND MPD WIRE

1	WHITE	-	BLUE	6	RED	-	BLUE	11	BLACK	-	BLUE	16	YELLOW	-	BLUE	21	VIOLET	-	BLUE
2	WHITE	-	ORANGE	7	RED	-	ORANGE	12	BLACK	-	ORANGE	17	YELLOW	-	ORANGE	22	VIOLET	-	ORANGE
3	WHITE	-	GREEN	8	RED	-	GREEN	13	BLACK	-	GREEN	18	YELLOW	-	GREEN	23	VIOLET	-	GREEN
4	WHITE	-	BROWN	9	RED	-	BROWN	14	BLACK	-	BROWN	19	YELLOW	-	BROWN	24	VIOLET	-	BROWN
5	WHITE	-	SLATE	10	RED	-	SLATE	15	BLACK	-	SLATE	20	YELLOW	-	SLATE	25	VIOLET	-	SLATE
NOTE 1. USE ABOVE COLOR CODE IN NUMERICAL ORDER FOR ALL COLOR - CODED CABLES SMALLER THAN TWENTY-FIVE PAIRS.																			
NOTE 2. USE ABOVE COLOR CODE IN NUMERICAL ORDER FOR ALL COLOR - CODED CABLES SMALLER THAN TWENTY-FIVE PAIRS.																			
NOTE 3. THE ABOVE COLOR CODE IS APPLICABLE FOR GROUP BINDER - STRING COLOR CODE.																			
NOTE 4. USE ABOVE COLOR CODE IS APPLICABLE FOR ALL TWENTY-FIVE PAIR COLOR CODE.																			
NOTE 5. USE ABOVE COLOR CODE IS APPLICABLE FOR ALL TWENTY-FIVE PAIR COLOR CODE.																			



OUTSIDE PLANT FACILITY RECORD

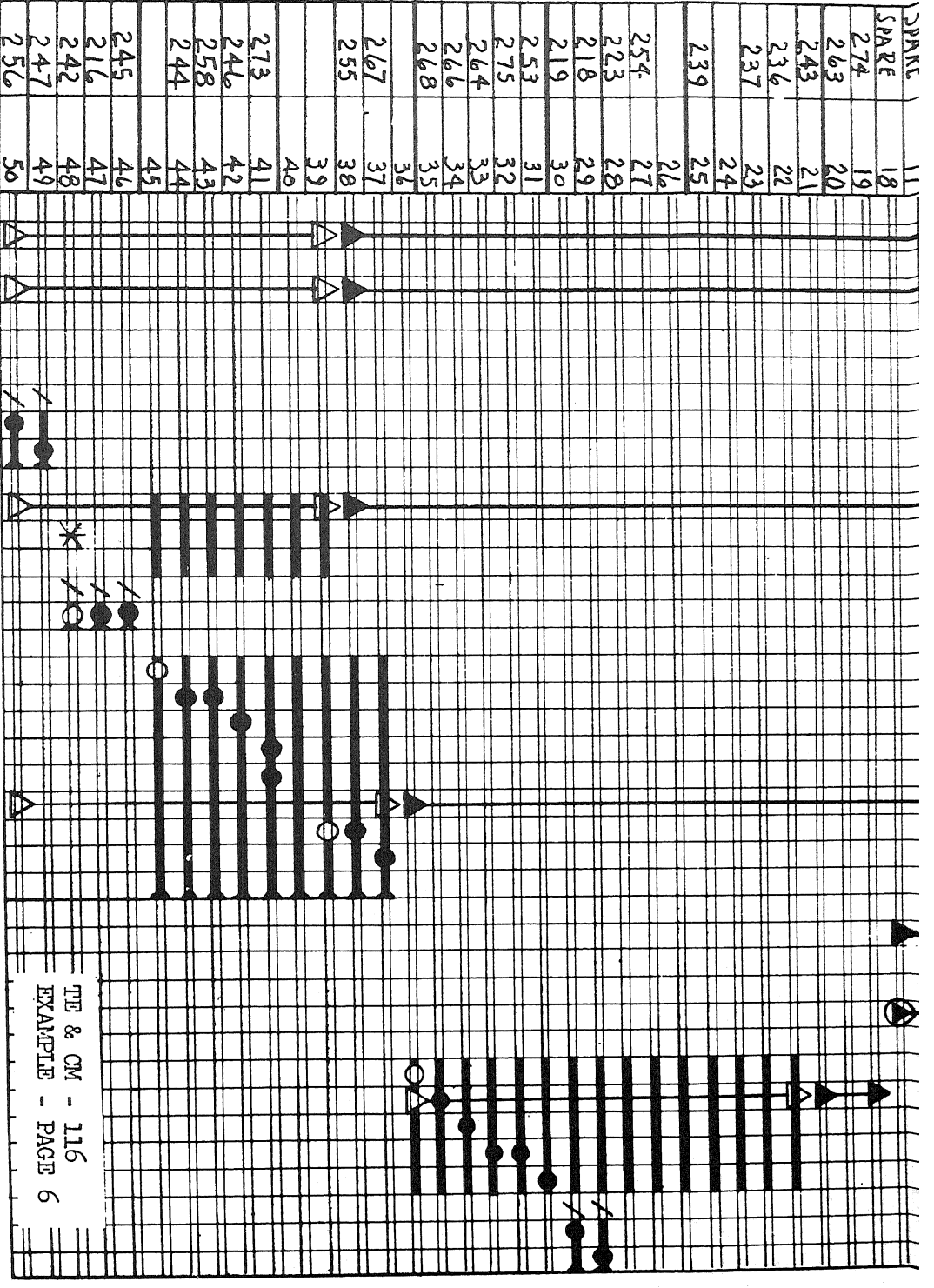
262 1-150 101-150 292

OFFICE CABLE COUNT SHEET COUNT SHEET NUMBER CABLE

A 5 101-150 292

△

PLANT FACILITY LAYOUT	PEDESTAL SECTION FEET	CONTROL POINT K/F	SECTION PED. NO. ...	ROUTE LETTER .....	CONTROL POINT NO.	CABLE LETTER .....	T.L. OR CIRCUT NUMBER	TERM. TYPE	PAIR	ESTABLISHMENT NUMBERS
B150-24P 1-180	3010	2.25	674	11.24	15.73	CO	A	A	1	10-73-13
B16-24P 91-96	1490 850	11.24	15.73	15.73	15.73	3D3	A	3	B	1
B150-24P 91-96	1810 1830	15.73	15.73	15.73	15.73	2	A	4	C	1
B150-24P 91-96	600 597	15.73	15.73	15.73	15.73	2	A	4	C	2
B150-24P 91-96	675 680	15.73	15.73	15.73	15.73	2	A	4	C	3
B150-24P 91-96	598 610	15.73	15.73	15.73	15.73	2	A	4	C	4
B150-24P 91-96	580 1022	15.73	15.73	15.73	15.73	2	A	4	C	5
B150-24P 91-96	3650 550	15.73	15.73	15.73	15.73	2	A	4	B	1
B150-24P 91-96	580 560	15.73	15.73	15.73	15.73	2	A	4	B	2
B150-24P 91-96	560 570	15.73	15.73	15.73	15.73	2	A	4	D	1
B150-24P 91-96	545 548	15.73	15.73	15.73	15.73	2	A	4	D	2
B150-24P 91-96	560 520	15.73	15.73	15.73	15.73	2	A	4	D	3
B150-24P 91-96	530 511	15.73	15.73	15.73	15.73	2	A	4	D	4
B150-24P 91-96	910 870	15.73	15.73	15.73	15.73	2	A	4	E	1
B150-24P 91-96	890 860	15.73	15.73	15.73	15.73	2	A	4	E	2
B150-24P 91-96	860 860	15.73	15.73	15.73	15.73	2	A	4	E	3
B150-24P 91-96	860 860	15.73	15.73	15.73	15.73	2	A	4	E	4
B150-24P 91-96	860 860	15.73	15.73	15.73	15.73	2	A	4	E	1
B150-24P 91-96	860 860	15.73	15.73	15.73	15.73	2	A	4	E	2



CABLE	SHEET NUMBER	SHEET COUNT	CABLE COUNT	OFFICE
A	5 OF 3	89-15	51-1	262

OUTSIDE PLANT FACILITY RECORD

# OUTSIDE PLANT FACILITY RECORD

262 1-150 1-50 4 of 5 A

OFFICE CABLE COUNT SHEET COUNT SHEET NUMBER CABLE

ESTABLISHMENT NUMBERS

PLANT  
FACILITY  
LAYOUT

PEDESTAL  
SECTION  
FEET

CONTROL POINT KF

2.25 674

11.25

15.72

20.22

20.14

SECTION PED. NO. ...  
ROUTE LETTER .....  
CONTROL POINT NO.  
CABLE LETTER .....

TEL. OR  
CABLE NO.  
NUMBER

TERM.  
TYPE  
CABLE  
PAIR

311-AV1  
312-AV2  
313-AV3  
314-AV4  
315-AV5

316-AV6  
317-AV7  
318-AV8  
319-AV9  
320-AV10

321-AV11  
322-AV12  
323-AV13  
324-AV14  
325-AV15

326-AV16  
327-AV17  
328-AV18  
329-AV19  
330-AV20

331-AV21  
332-AV22  
333-AV23  
334-AV24  
335-AV25

336-AV26  
337-AV27  
338-AV28  
339-AV29  
340-AV30

341-AV31  
342-AV32  
343-AV33  
344-AV34  
345-AV35

346-AV36  
347-AV37  
348-AV38  
349-AV39  
350-AV40

351-AV41  
352-AV42  
353-AV43  
354-AV44  
355-AV45

356-AV46  
357-AV47  
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360-AV50

361-AV51  
362-AV52  
363-AV53  
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369-AV59  
370-AV60

371-AV61  
372-AV62  
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374-AV64  
375-AV65

376-AV66  
377-AV67  
378-AV68  
379-AV69  
380-AV70

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382-AV72  
383-AV73  
384-AV74  
385-AV75

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390-AV80

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392-AV82  
393-AV83  
394-AV84  
395-AV85

396-AV86  
397-AV87  
398-AV88  
399-AV89  
400-AV90

401-AV91  
402-AV92  
403-AV93  
404-AV94  
405-AV95

406-AV96  
407-AV97  
408-AV98  
409-AV99  
410-AV100

b150-24P  
1-150

2-19  
49.50

4-48  
6-24

b150-24P  
1-50

b150-24P  
1-18

b150-24P  
1-34

b150-24P  
2-19

b150-24P  
2-19

b150-24P  
2-19

b150-24P  
2-19

b150-24P  
2-19

b150-24P  
2-19

b150-24P  
2-19

b150-24P  
2-19

b150-24P  
2-19

3010

800

760

510

700

572

738

1070

610

800

370

260

650

480

970

950

1060

1520

1205

1196

1211

1200

900

620

610

702

720

412

10-72-24  
10-72-60

10-72-20

10-72-14,16

10-72-13,15,17  
10-72-6,7

10-72-4,12  
10-72-5  
10-72-3

10-72-1,2  
10-72-8

10-62-15  
10-62-12  
10-62-14  
10-62-10,19  
10-62-5,6

10-62-9  
10-62-13

OUTSIDE PLANT FACILITY RECORD

262

1-150

19-36

5 OF 5

A

OFFICE CABLE COUNT SHEET COUNT SHEET NUMBER CABLE

ISHMENT NUMBERS

20

TE & CM - 116  
EXAMPLE - PAGE 8

**OUTSIDE PLANT FACILITY RECORD**

<div><div></div>OUTSIDE PLANT FACILITY RECORD</div>						
						O F
CABLE COUNT	SHEET COUNT	SHEET NUMBER	CABLE			
PLANT FACILITY LAYOUT	ESTABLISHMENT NUMBERS					
PEDESTAL SECTION FEET						
CONTROL POINT KF						
TEL. OR CIRCUIT NUMBER	TERM. TYPE	CABLE PAIR				



CONN. TERM	LINE EQ. NO.	CABLE PAIR	PEDESTAL NUMBER	BU BLK	ESTAB. NUMBER	STATION APPARATUS	CONN. TERM	LINE EQ. NO.	CABLE PAIR	PEDESTAL NUMBER	BU BLK	ESTAB. NUMBER	STATION APPARATUS
50							00						
59							09						
58							08						
57							07						
56							06						
55	271	84	A4D3	1-1	10-63-56	1-S1	105						
54							04						
53							03						
52	295	77	A5D1	-	10-63-12	1-S1	02						
51	385	62	A4B3	-	10-73-44	1-S1	01						
40							90						
49	209	89	A4B1	-	10-73-40	1-S1	99						
48							98						
47	276	76	A5D2	-	10-63-11	2-S1	97						
46	204	61	A4B4	-	10-63-17	1-S1	96						
45							95						
44							94						
43	294	75	A4B2	-	10-73-3	1-S1, 1-S3	93						
42	362	59	A4B6	-	10-63-12	1-S1	92						
41	250	86	A4D2	-	10-63-32	1-S1	91						
40	276	75	A5D1	-	10-63-12	1-S1	90						
39	296	74	A4B1	-	10-73-4	1-S1	89						
38	294	75	A4B2	-	10-73-3	1-S1, 1-S3	88						
37	362	59	A4B6	-	10-63-12	1-S1	87						
36	250	86	A4D2	-	10-63-32	1-S1	86						
35	276	75	A5D1	-	10-63-12	1-S1	85						
34	296	74	A4B1	-	10-73-4	1-S1	84						
33	294	75	A4B2	-	10-73-3	1-S1, 1-S3	83						
32	362	59	A4B6	-	10-63-12	1-S1	82						
31	250	86	A4D2	-	10-63-32	1-S1	81						
30	276	75	A5D1	-	10-63-12	1-S1	80						
29	296	74	A4B1	-	10-73-4	1-S1	79						
28	294	75	A4B2	-	10-73-3	1-S1, 1-S3	78						
27	362	59	A4B6	-	10-63-12	1-S1	77						
26	250	86	A4D2	-	10-63-32	1-S1	76						
25	276	75	A5D1	-	10-63-12	1-S1	75						
24	296	74	A4B1	-	10-73-4	1-S1	74						
23	294	75	A4B2	-	10-73-3	1-S1, 1-S3	73						
22	362	59	A4B6	-	10-63-12	1-S1	72						
21	250	86	A4D2	-	10-63-32	1-S1	71						
20	276	75	A5D1	-	10-63-12	1-S1	70						
19	296	74	A4B1	-	10-73-4	1-S1	69						
18	294	75	A4B2	-	10-73-3	1-S1, 1-S3	68						
17	362	59	A4B6	-	10-63-12	1-S1	67						
16	250	86	A4D2	-	10-63-32	1-S1	66						
15	276	75	A5D1	-	10-63-12	1-S1	65						
14	296	74	A4B1	-	10-73-4	1-S1	64						
13	294	75	A4B2	-	10-73-3	1-S1, 1-S3	63						
12	362	59	A4B6	-	10-63-12	1-S1	62						
11	250	86	A4D2	-	10-63-32	1-S1	61						
10	276	75	A5D1	-	10-63-12	1-S1	60						
9	296	74	A4B1	-	10-73-4	1-S1	59						
8	294	75	A4B2	-	10-73-3	1-S1, 1-S3	58						
7	362	59	A4B6	-	10-63-12	1-S1	57						
6	250	86	A4D2	-	10-63-32	1-S1	56						
5	276	75	A5D1	-	10-63-12	1-S1	55						
4	296	74	A4B1	-	10-73-4	1-S1	54						
3	294	75	A4B2	-	10-73-3	1-S1, 1-S3	53						
2	362	59	A4B6	-	10-63-12	1-S1	52						
1	250	86	A4D2	-	10-63-32	1-S1	51						
0	276	75	A5D1	-	10-63-12	1-S1	50						





## OUTSIDE PLANT LOCATION DIAGRAM

[illegible]

# LEGEND

## NUMBERING SYSTEM

CABLE (LETTER) A 1 A 1  
 CONTROL POINT (NUMBER) \_\_\_\_\_  
 ROUTE (LETTER) \_\_\_\_\_  
 SECTION PEDESTAL OR TERMINAL (NUMBER) \_\_\_\_\_

## ESTABLISHMENT NUMBERS

MAP NUMBER 10 63 12  
 BLOCK NUMBER \_\_\_\_\_  
 SUBS. KIBER NUMBER \_\_\_\_\_

## NUMBERING SYSTEM EXAMPLES

A - A 1 - CABLE A, ROUTE A, 1ST PEDESTAL FROM CENTRAL OFFICE  
A 1 A - - CABLE A, 1ST CONTROL POINT, ROUTE A FROM C.O.  
A 1 A 1 - CABLE A, 1ST CONTROL POINT, ROUTE A, PEDESTAL 1 BEYOND CONTROL POINT 1.

NOTE: Numbering system always consists of a letter, a number, a letter & a number, except when dashes apply (see above).

CABLE PAIR - IN ITS USAGE AREA  
 ALLOCATED PAIR  
 ASSIGNED PAIR  
 TEMPORARY PAIR ASSIGNMENT  
 PAIR CUT DEAD  
 CONTROL POINT  
 LOADING AT CONTROL POINT  
 CARRIER FILTER  
 IDENTIFYING  
 DEAD PAIRS

CARRIER REPEATER  
 VOICE FREQUENCY REPEATER  
 CARRIER CHANNEL - INDICATE IF MORE THAN ONE CHANNEL.  
 FACILITY END  
 BUILDING-OUT CAPACITORS  
 OPEN WIRE PIN POSITIONS

## STANDARD GROUP COLOR CODE - CABLE AND MPD WIR

1	WHITE	BLUE	7	RED	BLUE	11	BLACK	BLUE	15	YELLOW	BLUE	21	VIO
2	WHITE	ORANGE	8	RED	ORANGE	12	BLACK	ORANGE	16	YELLOW	ORANGE	22	VIO
3	WHITE	GREEN	9	RED	GREEN	13	BLACK	GREEN	17	YELLOW	GREEN	23	VIO
4	WHITE	BROWN	10	RED	BROWN	14	BLACK	BROWN	18	YELLOW	BROWN	24	VIO
5	WHITE	SLATE	11	RED	SLATE	15	BLACK	SLATE	20	YELLOW	SLATE	28	VIO

NOTE 1: USE ABOVE COLOR CODE IN NUMERICAL ORDER FOR ALL COLOR - CODED CABLES SMALLER THAN TWENTY FEET.  
 NOTE 2: USE ABOVE COLOR CODE IN NUMERICAL ORDER FOR ALL COLOR - CODED CABLES SMALLER THAN TWENTY FEET.  
 NOTE 3: THE ABOVE COLOR CODE IS APPLICABLE FOR ALL TWENTY-FIVE PAIR CABLES.  
 NOTE 4: USE ABOVE COLOR CODE IN NUMERICAL ORDER FOR ALL SIZES OF MULTI-PAIRED DISTRIBUTION WIRE.

[illegible]

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THE & CM - 116  
EXHIBIT B - BACK

# OUTSIDE PLANT FACILITY RECORD

		OFFICE	CABLE COUNT	SHEET COUNT	SHEET NUMBER	OF	CABLE
ESTABLISHMENT NUMBERS							
PLANT FACILITY LAYOUT							
PEDESTAL SECTION FEET							
CONTROL POINT KF							
SECTION PED. NO. ..							
ROUTE LETTER .....							
CONTROL POINT NO.							
CABLE LETTER .....							
TEL. OR CIRCUIT NUMBER							
TERM. TYPE							
CABLE PAIR							

[illegible]

OFFICE				CENTRAL OFFICE - FACILITY RECORD								GROUP	
CONN. TERM	LINE EQ. NO.	CABLE PAIR	PEDESTAL NUMBER	BU BLK NUMBER	ISFAB. NUMBER	STATION APPARATUS	CONN. TERM	LINE EQ. NO.	CABLE PAIR	PEDESTAL NUMBER	BU BLK NUMBER	ESTAB. NUMBER	STATION APPARATUS
50							00						
59							09						
58							08						

OFFICE

## CENTRAL OFFICE FACILITY RECORD

GROUP

CONN. TERM	LINE EQ. NO.	CABLE PAIR	PEDESTAL NUMBER	BU BLK	ESTAB. NUMBER	STATION APPARATUS	CONN. TERM	LINE EQ. NO.	CABLE PAIR	PEDESTAL NUMBER	BU BLK	ESTAB. NUMBER	STATION APPARATUS
50							00						
59							09						
58							08						
57							07						
56							06						
55							05						
54							04						
53							03						
52							02						
51							01						
40							90						
49							99						
48							98						
47							97						
46							96						
45							95						
44							94						
43							93						
42							92						
41							91						
30							80						
39							89						
38							88						
37							87						
36							86						
35							85						
34							84						

[illegible]

## BUNCH BLOCK DATA

[illegible]

**NOTES:**

TE &amp; CM - 116

EXHIBIT D - BACK

[illegible]

[illegible]

EXAMPLE COPY - IN FRONT OF THE

TE & CM - 116  
EXHIBIT E - BACK

# OUTSIDE PLANT FACILITY RECORD

OFFICE CABLE COUNT SHEET COUNT SHEET NUMBER CABLE

OF

## OPEN WIRE APPLICATION

### ESTABLISHMENT NUMBERS

PLANT  
FACILITY  
LAYOUT

PEDESTAL  
SECTION  
FEET

CONTROL POINT KF

SECTION PED. NO. ...

ROUTE LETTER .....

CONTROL POINT NO.

CABLE LETTER .....

TEL. OR  
CIRCUIT  
NUMBER

TERM.  
TYPE  
CABLE  
PAIR

350

298

260

229

2

3

4

5

6

8-12-30

8-12-24

8-12-18

8-12-16

8-12-12

8-12-6

8-12-4

8-12-2

8-12-15

8-12-13

8-12-11

8-12-9

8-12-7

8-12-5

8-12-3

8-12-1

530

602

510

460

198

210

612

1020

212

997

1070

1031

992

420

410

202

412

1006

420

200

410

1006

206

1060

810

198

1002

412

602

250

1000

610

20 27

24 78

29 29

33 78

NOTE: THIS EXAMPLE IS IN NO WAY RELATED TO THE